Let's protect our earth

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS WASTE MANAGEMENT
CN 028
Trenton, N.J. 08625-0028
(609) 633-7141
Fax # (609) 633-1454

Include to Selected

MAY 2 5 1990

8665

Mr. S. A. Savitt
Savitt and Associates
1050 Beerge St.
New Brunswick, NJ 08901

RE: Biddleman, Inc.
4 Central Ave.
Lot 32, Block 9
West Orange Township, Essex County
#N61436 Rescinded

Dear Mr. Savitt:

On June 9, 1986 the Department informed your attorney Michael Gordon that the cessation of operations at the above referenced facility was subject to ECRA. On the basis of additional information represented in the affidavit of Murray J. Biddelman the Department rescinds the decision of June 9, 1986.

This decision is made on the basis that the above referenced facility is not an industrial establishment as defined by the Act. Please be advised however, due to the on-site contamination which exists at the property, this case is being referred for enforcement action under other Environmental Statutes including but not limited to Spill Compensation & Control Act, Solid Waste Management Act and Water Pollution Control Act. Further any inaccuracies in the affidavit or subsequent changes in the facts stated therein could alter the Department's determination.

The inappliability of the Environemental Cleanup Responsibility Act (ECRA) to this transaction does not relieve the above referenced of any responsibilies under any other environmental statutes, regulations or permits.

148423

APPENDIX 5

1.0 INTRODUCTION

The following presents the soil sampling and analysis plan developed for Biddelman Incorporated located at 4 Central Avenue, West Orange, NJ. The program detailed below addresses the pertinent regulatory requirements of the New Jersey Environmental Clean-up Responsibility Act (ECRA) specifically Item 14 of the regulations developed by the New Jersey Department of Environmental Protection (NJDEP). The purpose of the plan is to determine the horizontal and vertical extent of any contamination originating from facility operations.

2.0 ENVIRONMENTAL SETTING

2.1 Facility History and Setting

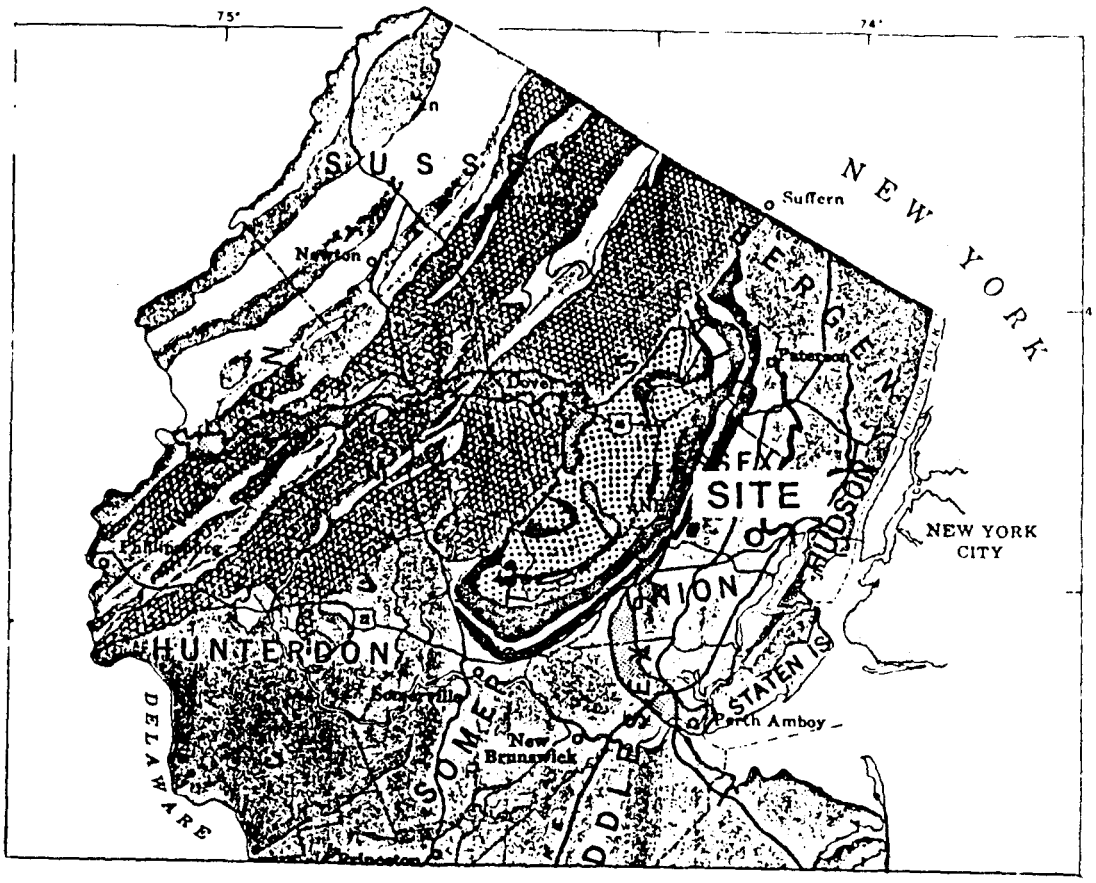
Biddelman Incorporated occupies a two-story brick structure that is approximately 50 years old. The site, located at 4 Central Avenue, West Orange, NJ, has about 30,000 square feet of space and sits at the foot of the Watchung Mountains (Figure 5.1). The major land uses in the study area are urban, industrial, commercial, and residential. The closest residential area is located south-southwest of the property. No public or private water wells are located within 1/4-mile of the site.

The company is engaged in the wholesale distribution of dry goods and dry cleaning supplies. The materials and chemicals involved in this business range from organic solvents for spotting to perchlor for drycleaning. A more complete description of the operation is described in Appendix 2, Item 10 of the Site Evaluation Submission.

2.2 Site Map and Soils Description

Approximately one-half of the property area is paved; the remaining area is covered by the building, (see Figure 5.2). The entire site area was filled with cinders and gravel in order to provide for a stable foundation, the fill material is about 2 to 3 feet in thickness.

The soils beneath the surface overburden are comprised of poorly sorted, fine to medium silty sands and sands with dense clay and gravels. The soils in the site are included in the Montello series during Engineering Soil Survey conducted by Rutgers University (Engineering Soil Survey of New Jersey, Report No. 2, Rutgers University, 1955). Surface drainage of the soils is good, but internal drainage is poor.



GEOLOGIC MAP

OF

NEW JERSEY

1959

Scale: 1=1,000,000 (approx.)

Miles

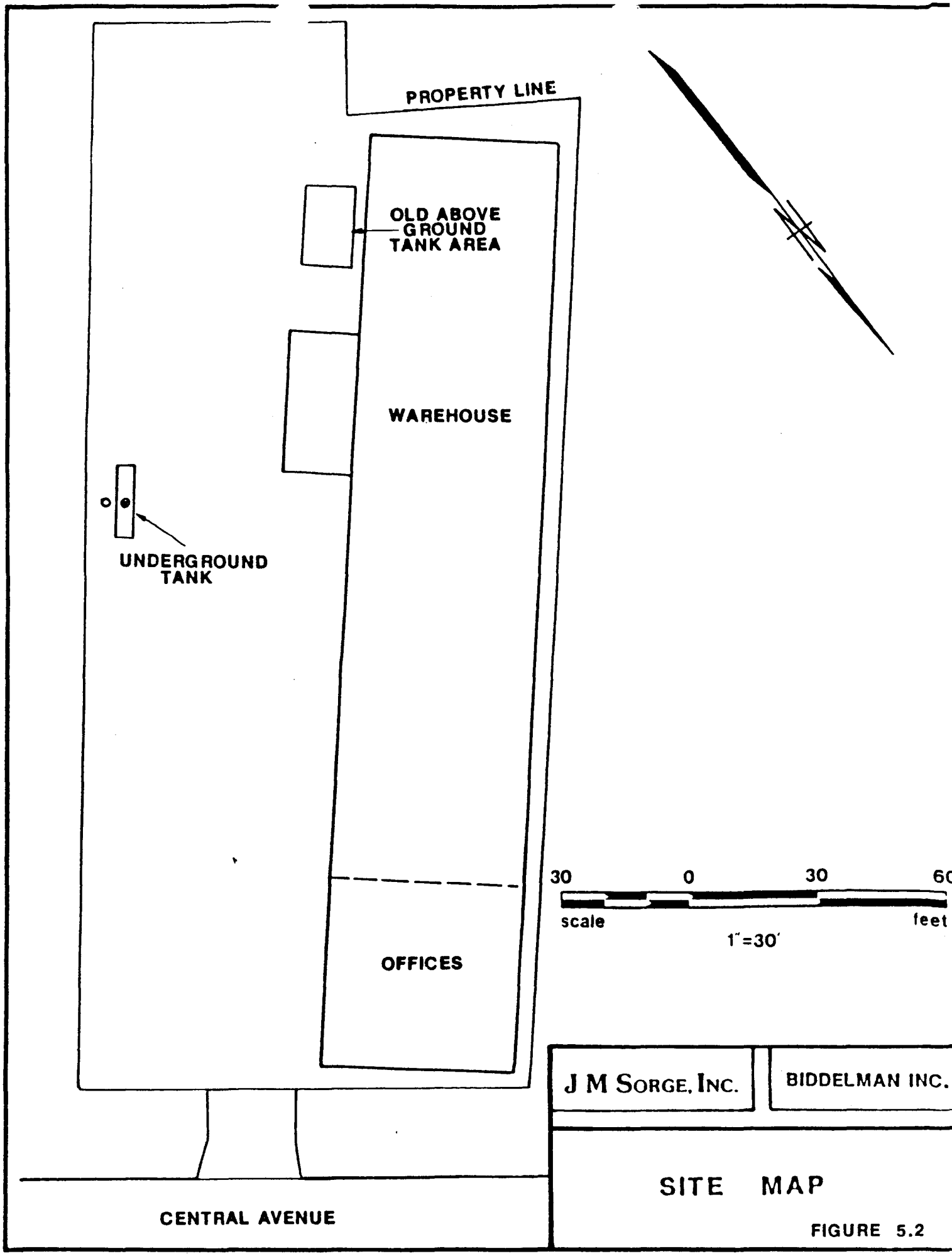
Kilometers

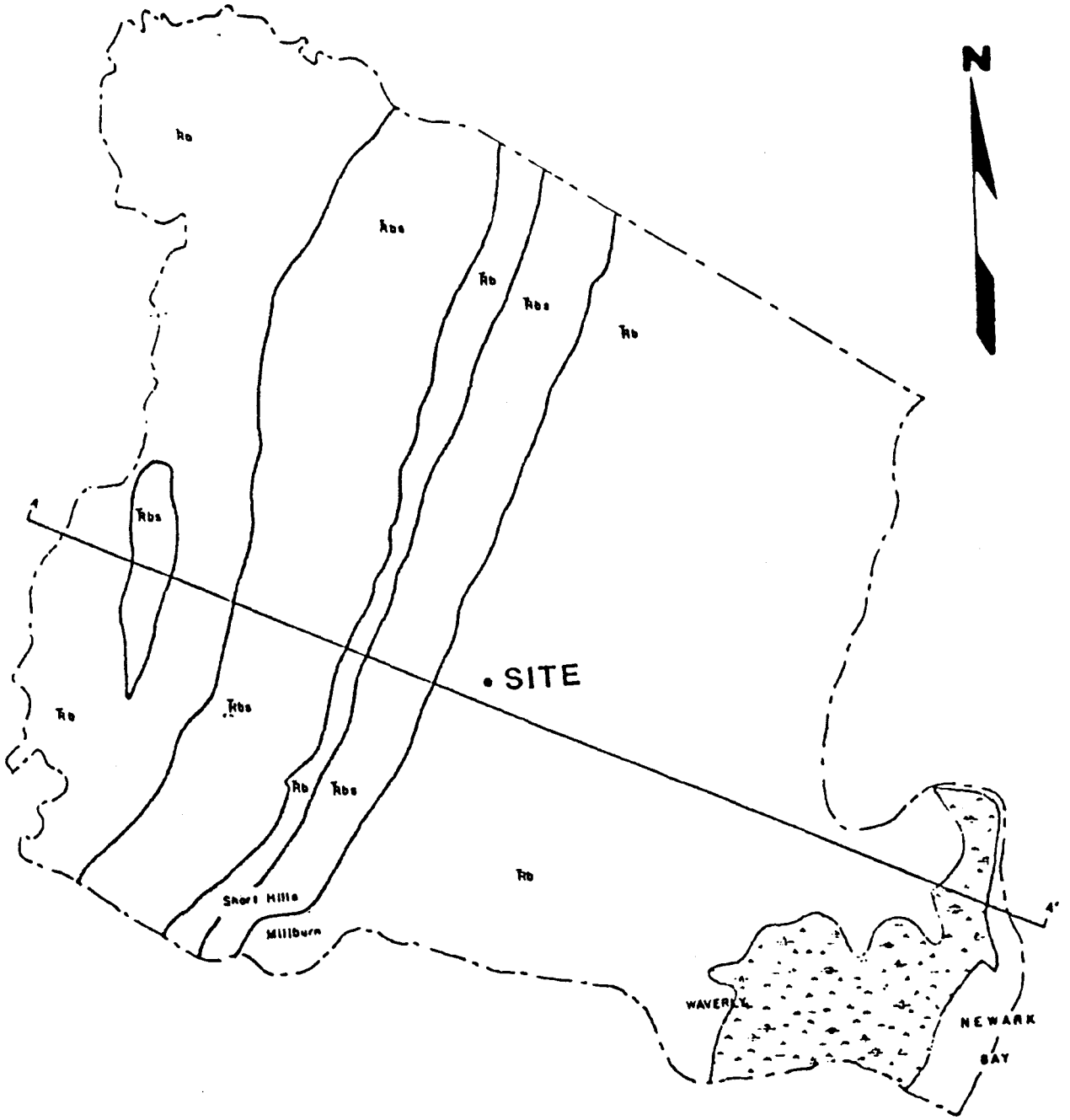
REVISED 1977

J M SORGE, INC	BIDDELMAN INC.

SITE LOCATION MAP

FIGURE 5.1


PROPERTY LINE
OLD ABOVE GROUND TANK AREA
WAREHOUSE
UNDERGROUND TANK
OFFICES
CENTRAL AVENUE
30 0 30 60
scale feet
1"=30'
J M SORGE, INC.
BIDDELMAN INC.
SITE MAP
FIGURE 5.2



LEGEND

Rb — Brunswick Shale

Rbs — Basalt (Flows)

Formation Contact

A — A' Cross Section

BOUNDARIES

County

NOTE: Surficial Quaternary deposits not shown.

Base Map Atlas Sheet No. 40

SCALE

4 3 2 1 0 4 miles

J M SORGE, INC.

BIDDELMAN INC.

GEOLOGIC MAP OF ESSEX COUNTY

FIGURE 5.3

120668

BREWER ASSOCIATES

2.3 Geology, Hydrogeology and Surface Drainage

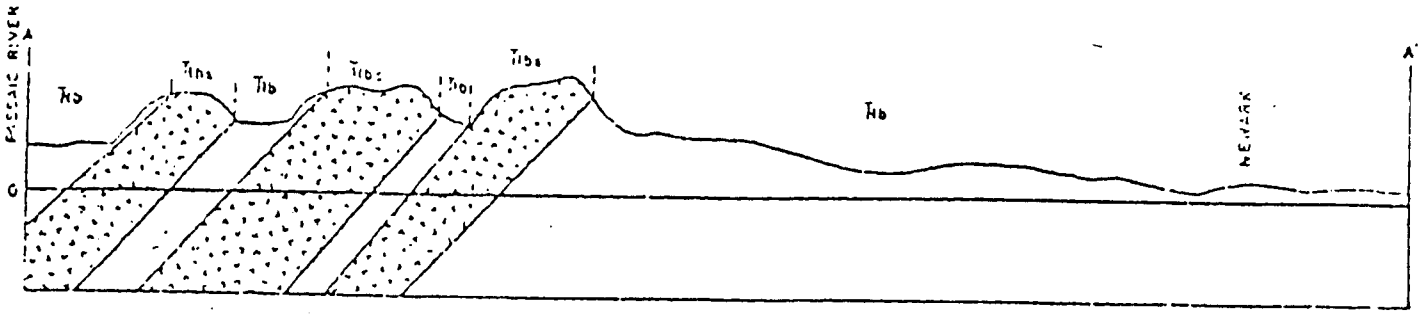
Regional Geology/Hydrogeology

The Brunswick Formation and Watchung Basalt of the Newark Group of Late Triassic age underlies Essex County. The Brunswick Formation, the uppermost unit of the Newark Group, consists dominantly of interbedded brown, reddish-brown, and gray shale, sandy shales, sandstone and some conglomerate. The total thickness of the Brunswick Formation exceeds 6,000 feet. The Watchung Basalt consists of three extensive sequences of lava flows intercalated with the shale and sandstone of the Brunswick Formation. The generalized bedrock geologic map (Figure 5.3) shows the areal extent of the rocks of Triassic age underlying Essex County. A geologic cross-section is presented in Figure 5.4. Overlying the rocks of the Newark Group are unconsolidated clay, sand, and gravel deposits of the Pliestocene and Recent Age. The Pliestocene deposits are the most widespread and are found throughout the county. Recent deposits are confined to present day stream valleys. These glacio-fluvial unconsolidated deposits of Pliestocene and Recent age are as much as 300 feet in thickness. In the areas between valleys, where the bedrock surface is high, it ranges between 0 to 70 feet.

Rocks of the Brunswick Formation are the main source of the groundwater in Essex County. The shales and sandstones are generally capable of sustaining moderate to large yields. Wells in sandstone and shale of the Brunswick Formation yield from 35 to 820 gpm; the most productive water-bearing zones are commonly between depths of 300 to 400 feet. Draw down due to pumping is greatest in the strike-direction (approximately N 30^{o} E) and least in the direction perpendicular to strike.

Site Specific Geology/Hydrogeology

The soil boring information from the earlier investigations by others at the site indicate that a fill layer consisting of cinders and gravel occur to a depth of about 3 to 4 feet below grade. This fill layer is underlain by an intermittent clay to silty/sandy clay strata which in turn, appears to grade to a fine to medium sand and subangular to subrounded gravel. These types of deposits are common in the site area owing to glaciofluvial depositional processes. No groundwater was encountered during the soil boring program. Based on analysis of NJDEP well records for the site area, groundwater occurs at a depth of 25 to 27 feet below grade.



ESSEX COUNTY

SCALE

4 3 2 1 0 4 miles

Horizontal Scale: 1.3" = 4 Miles

Vertical $\frac{1}{10}$" = 200 Feet

LEGEND

Trb Brunswick Formation

Trbs Basalt Flow

J M SORGE, INC.

SIDDELMAN INC.

GEOLOGIC CROSS SECTION OF ESSEX COUNTY

New Jersey Geological Survey 1974

FIGURE 5.4

126666

BREWER ASSOCIATES

ducted by others, indicated the presence of oil contamination at the location of boring PH1 (see Figure 5.6). The following plan is designed to determine if contamination is present, since the validity of the previous sample is in question. And to determine if any oil present is related to the abandoned tank or to offsite operations.

JMS will install boring PH1 using the impact soil sampler previously discussed. Split spoon samples will be taken at 2 foot intervals to a depth of 6 feet or the 2 feet beyond the depth of non-detection using the Hnu meter. If the presence of oil is indicated based on observations or Hnu readings, an additional 3 borings will be conducted as shown on the site map. One sample will be selected from each boring at a depth of one foot or corresponding to the depth of the maximum Hnu and visual contamination level if any. If significant levels of contamination are indicated additional samples will be required to delineate the extent of the problem. All samples obtained for laboratory analysis will be analyzed for petroleum hydrocarbon content.

The proposed sampling plan is summarized in Table 1 for your reference.

TABLE 1
SAMPLING PLAN SUMMARY TABLE

Tank Filling Area Boring	Sample Depth (feet)	Analytic Parameters
C1	1	Priority Pollutants
	7	Volatile Organics
	Hnu Det +2'*	Volatile Organics
B1	Max Hnu**	Volatile Organics
	Hnu Det +2'*	Volatile Organics
B2	Max Hnu**	Volatile Organics
	Hnu Det +2'*	Volatile Organics
B3	Max Hnu**	Volatile Organics
	Hnu Det +2'*	Volatile Organics
B4	Max Hnu**	Volatile Organics
	Hnu Det +2'*	Volatile Organics
B5	Max Hnu**	Volatile Organics
	Hnu Det +2'*	Volatile Organics
BK1	3'	Volatile Organics
	Max Hnu**	Volatile Organics
BK2	3'	Volatile Organics
	Max Hnu**	Volatile Organics
B6	Max Hnu**	Volatile Organics
B7	Max Hnu**	Volatile Organics
B8	Max Hnu**	Volatile Organics
B9	Max Hnu**	Volatile Organics

TOTAL SAMPLES: 20 Volatile Organics
1 Priority Pollutants

TOTAL BORINGS: 12

*Note: Hnu Det +2' - Corresponds to 2 feet beyond the depth at which contamination is no longer detected by the Hnu.

**Note: Max Hnu - Corresponds to the depth associated with the maximum reading from the Hnu in this borehole.

SAMPLING PLAN SUMMARY (Continued)

Petroleum Hydrocarbons

Boring	Sample Depth	Analytic Parameters
PH1	1'	Petroleum Hydrocarbons
	Max Hnu*	Petroleum Hydrocarbons
PH2	Max Hnu*	Petroleum Hydrocarbons
PH3	Max Hnu*	Petroleum Hydrocarbons
PH4	Max Hnu*	Petroleum Hydrocarbons

TOTAL SAMPLES: 6 Petroleum Hydrocarbons

TOTAL BORINGS: 4

*Note: Max Hnu - Corresponds to the depth associated with the maximum reading from the Hnu in this borehole.

APPENDIX 4
PRODUCTS CONTAINING HAZARDOUS SUBSTANCES

PRODUCT NAME	HAZARDOUS SUBSTANCES	CONTAINER SIZE	CLOSING INVENTORY *
ADCO, INC.			
AMERICAN P.O.G. REMOVER	AROMATIC HYDROCARBONS	1 GAL	15
AMYL ACETATE	AMYL ACETATE	20 GAL	3
BOILER COMPOUND	POTASSIUM HYDROXIDE	1 GAL	9
		20 GAL	2
FASHION FINISH	PETROLEUM DISTILLATES	1 GAL	8
		6 GAL	3
KNOCKOUT	AROMATIC HYDROCARBONS	1 GAL	5
PURO	1,1,1 TRICHLOROETHANE CHLORINATED HYDROCARBON	1 GAL	7
TEXTURE LIFE	PETROLEUM DISTILLATES	1 GAL	9
		6 GAL	1
		20 GAL	4
SPEE DEE	AROMATIC HYDROCARBONS	1 GAL	19
STA DRI	PETROLEUM DISTILLATES	1 GAL	17
SUNSHINE FRESH	PETROLEUM DISTILLATES	1 CAN	24
		1 GAL	4
WETSPOT	AMMONIA	1 GAL	7
CALED SIGNAL CHEMICAL INC.			
BRITZ SIZE BEAUTY TEX	PETROLEUM SOLVENT	1 GAL	7
CAL DRY/ RAINCOAT	PERCHLOROETHYLENE PETROLEUM HYDROCARBONS	1 GAL	7
CAL SPRAY	1,1,1 TRICHLOROETHENE PETROLEUM HYDROCARBONS	1 GAL	20
CAL SPRAY SPOTTER	2-BUTOXY ETHANOL	1 GAL	19
	PETROLEUM SOLVENT	20 GAL	2
CALED III	PETROLEUM HYDROCARBONS	20 GAL	2
CAL STRIP/ PURPLE MAGIC	TITANIUM SULFATE	1 GAL	24
CINCH	2-BUTOXY ETHANOL PETROLEUM SOLVENT	1 GAL	11
C W T	ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE	1 GAL	8
FAST PR/ VDS	1,1,1 TRICHLOROETHENE	1 GAL	30
FWT/ SIGNAL 33	SODIUM HYDROXIDE	1 GAL	24
		20 GAL	2
KWIK	PETROLEUM HYDROCARBONS 2-BUTOXY ETHANOL AMYL ACETATE	1 GAL	11
LONG LIFE	PETROLEUM HYDROCARBONS	1 GAL	9
NU TOUCH	2-BUTOXY ETHANOL	30 GAL	1
PLASTICIZER	DI-N-BUTYL PHTHALATE	1 GAL	12
PRO-TE-CAL	HEXYLENE	1 GAL	22
STAT II	PETROLEUM HYDROCARBONS	1 GAL	13

* THESE ITEMS WERE REMOVED AT CLOSING

PRODUCT NAME	HAZARDOUS SUBSTANCES	CONTAINER SIZE	CLOSING INVENTORY *
		20 GAL	2
TAN-E-CAL/ TANPAN	LACTIC ACID	1 GAL	11
TEX SURE	PETROLEUM HYDROCARBONS	1 GAL	12
VEL-ODOR	ISOPROPONAL	1 GAL	14
DIAMOND SHAMROCK CHEMICALS COMPANY			
ISP FABRIC BRIGHTENER	HYDROGEN PEROXIDE	5 GAL	40
		30 GAL	4
TEX-FLUFF W/ BAC-STAT	AMMONIUM SALTS & OILS	30 GAL	2
CLIPPER CLEANER	METHYLENE CHLORIDE	5 GAL	8
LAIDLAW INC.			
BOOT SPRAY SPOTTER	GLYCOLS	1 GAL	16
CLOROSHEEN	HYDROCARBONS	1 GAL	17
TERGIT NEUTRAL LUBRICANT	SURFACTANTS	1 GAL	6
WETSPO NON-OILY P.O.G.	PETROLEUM,CHLORINATED HYDROCARBON, GLYCOL ETHER	1 GAL	20
U-SAN-O	PETROLEUM DISTILLATE	1 GAL	19
WALLER STAT-ANTI STAT	HYDROCARBONS	1 GAL	11
R. R. STREET & CO. INC.			
DRY SIZE	PETROLEUM ODOR	1 GAL	8
PICRIN	CHLORINATED HYDROCARBON	1 GAL	16
		15 GAL	2
PYRATEX	CARBON DIOXIDE	1 GAL	51
REP 100		1 GAL	21
STATICOL	HYDROGEN CHLORIDE	1 GAL	50
		15 GAL	6
		55 GAL	1
STREEPENE	SULFUR DIOXIDE	1 LB JAR	23
FORMULA 209	CARBON DIOXIDE CARBON MONOXIDE	I PINT	12
STREETEX	CO2, CO, SO2, SO3	1 GAL	43
		15 GAL	5
TESTING SOLN. NO. 1	HYDROGEN CHLORIDE	1 PINT	12
WARCO LABORATORIES			
KIL-ODE	ISOPROPAL ALCOHOL	12 OZ	37
STAIN-A-WAY	SODIUM BIFLOURIDE HYDROCHLORIC ACID	1 GAL	96
U. N. X. CHEMICALS INC.			
ALKALAIA	SODIUM HYDROXIDE SODIUM METASILICATE	100	6
PEAK	SODIUM HYDROXIDE SODIUM METASILICATE	100	5

* THESE ITEMS WERE REMOVED AT CLOSING

PRODUCT NAME	HAZARDOUS SUBSTANCES	CONTAINER SIZE	CLOSING INVENTORY *
BID	SODIUM HYDROXIDE SODIUM METASILICATE	50	27
SUPREME	PERCARBONATE	40 #	1
TEK	SODIUM HYDROXIDE SODIUM METASILICATE	100	9
SOLVENT-SPECIAL	SODIUM HYDROXIDE SODIUM METASILICATE	100	15
SUPER-BRIGHT	TRICHLOROISOCYANURIC ACID	100	1
BRIGHT-X-20	TRICHLOROISOCYANURIC ACID	100	16
DRY BLEACH SPECIAL	TRICHLOROISOCYANURIC ACID	100	3
FOREMOST	SODIUM PERCARBONATE	40 LB	4
FLOUR-O-CIDE	SODIUM SILICOFLOURIDE	50 LB	3
SOUR-CIDE	SODIUM SILICOFLOURIDE	100	10
TRUST	HYDROGEN PEROXIDE	5 GAL	5
SOFT-BRITE LIQUID	PHOSPHORIC ACID	5 GAL	7

MATERIAL	QUANTITY	LOCATION	STORAGE METHOD	TO REMAIN?
PERCHLOROETHYLENE	4000 GAL	EAST OF BUILDING	4000 ABOVE GROUND STORAGE TANK	NO
FUEL OIL	UNK.	S.EAST OF BUILDING	UNDERGROUND TANK	NO

* THESE ITEMS WERE REMOVED AT CLOSING

APPENDIX 6

DECONTAMINATION PROCEDURE

Biddelman Incorporated closed the facility on January 1, 1986, pending approval of a negative declaration affidavit. At that time Biddelman Inc. removed its entire operation.

The decommission plan includes the removal of all inventory and equipment in the building. No hazardous materials will remain at the site. As mentioned before, the above ground tank has already been removed from the site. A detailed description of the excavation and clean-up will be included in the Site Clean-up Report for this facility.

The underground tank will be excavated and removed and the absence of contamination will be established through similar horizontal and vertical sampling delineations that will be used for the above ground tanks. Again, a detailed description of this will be included in the site clean-up report.

01-22-23

State of New Jersey
Department of Environmental Protection and Energy
Division of Responsible Party Site Remediation
Metro Regional Office
2 Babcock Place
West Orange, NJ 07052

Scott A. Weiner
Commissioner

Karl J. Delaney
Director

Personalized Letter Service & Sales Co., Inc.
4 Central Avenue
West Orange, New Jersey 07052

Att: Richard A. Praitano, Owner

Sub: Voluntary Cleanup Program for
Remedial Investigation/Actions Performed
At Biddleman Inc. 4 Central Avenue
West Orange, Essex County
DRPSR Case# 90-08-29-SP01M

November 9,1993

Dear Mr. Priatano:

The purpose of this correspondence is inform you that the above referenced location has been returned to this office as a potential site for the Department's Voluntary Cleanup Program (see attached). Also maintained by this office is the information which you recently submitted to Lynn Fleming at the Bureau of State Case Management.

At this time the Department wishes to offer you the opportunity to enter into its Voluntary Cleanup Program for the evaluation of the previously performed investigations and actions at the location. Participation in the Department's Voluntary Cleanup Program is the mechanism by which the Department can evaluation and comment on the actions previously performed at the site.

If you wish to participate in the Voluntary Cleanup Program, please complete and submit the enclosed Memorandum of Agreement application to this office. If a response is not received within thirty (30) days from the date of this letter, the Department will assume that you do not wish to participate in the program. If you choose not to participate, your site will be prioritized and subject to potential remediation under and Administrative Consent Order when the site becomes a priority to the Department.

If you have any questions concerning the contents of this letter or the Voluntary Cleanup Program, please contact me at (201) 669-3960.

Sincerely,

Gary Greulich
Senior Environmental Specialist

cc: File

Personalized Letter Service & Sales Co., Inc.

Established 1946

4 Central Avenue • West Orange, New Jersey 07052 • (201) 677-6080 • Fax: (201) 677-7529

October 9, 1993

RE: Biddleman Property, 4 Central Ave., West Orange

Dear Ms. Fleming,

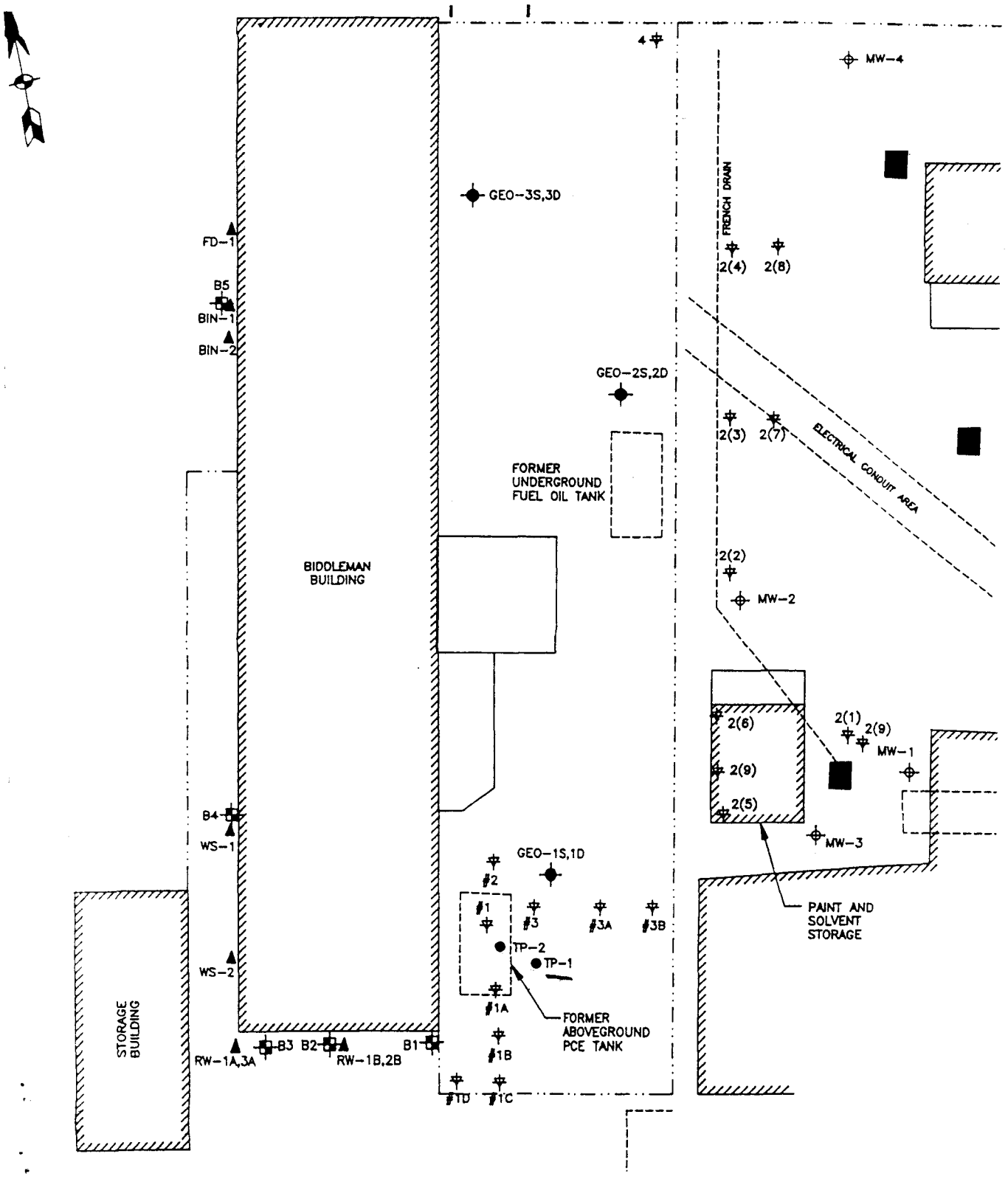
Here are the new Geo's that we discussed the other day. I hope these stat's will be helpful in order to expedite this clean up.

Please call me when you have an answer to whether this is applicable.

Thank you.

Sincerely,

Richard A. Praitano


4
MW-4
GEO-3S,3D
FRENCH DRAIN
2(4)
2(8)
FD-1
B5
BIN-1
BIN-2
GEO-2S,2D
2(3)
2(7)
ELECTRICAL CONDUIT AREA
FORMER
UNDERGROUND
FUEL OIL TANK
BIDDLEMAN
BUILDING
2(2)
MW-2
2(1)
2(9)
MW-1
2(6)
2(9)
2(5)
MW-3
B4
WS-1
GEO-1S,1D
#2
#1
#3
#3A
#3B
TP-2
TP-1
PAINT AND
SOLVENT
STORAGE
WS-2
#1A
FORMER
ABOVEGROUND
PCE TANK
STORAGE
BUILDING
RW-1A,3A
B3
B2
RW-1B,2B
B1
#1B
#1D
#1C

SAMPLE DESCRIPTION INFORMATION
for
GEO Engineering

Lab ID	Client ID	Matrix	Sampled Date	Sampled Time	Received Date
027587-0001-SA	GEO-3D	AQUEOUS	01 MAR 93	11:35	01 MAR 93
027587-0002-SA	GEO-2D	AQUEOUS	01 MAR 93	12:05	01 MAR 93
027587-0002-RE	GEO-2D	AQUEOUS	01 MAR 93	12:05	01 MAR 93
027587-0003-SA	GEO-1D	AQUEOUS	01 MAR 93	12:23	01 MAR 93
027587-0004-FB	FIELD BLANK	AQUEOUS	01 MAR 93	11:55	01 MAR 93
027587-0004-RE	FIELD BLANK	AQUEOUS	01 MAR 93	11:55	01 MAR 93
027587-0005-TB	TRIP BLANK	AQUEOUS	01 MAR 93		01 MAR 93

Ense
A Coming

Priority Pollutant Volatile Organics

Method 624

Client Name: GEO Engineering
Client ID: GEO-3D
Lab ID: 027587-0001-SA
Matrix: AQUEOUS Sampled: 01 MAR 93 Received: 01 MAR 93
Authorized: 01 MAR 93 Prepared: NA Analyzed: 05 MAR 93

Parameter	Result	Units	Reporting Limit	
Chloromethane	ND	ug/L	50	u
Bromomethane	ND	ug/L	50	
Vinyl Chloride	ND	ug/L	50	
Chloroethane	ND	ug/L	50	
Methylene chloride	ND	ug/L	25	
1,1-Dichloroethene	ND	ug/L	25	
1,1-Dichloroethane	ND	ug/L	25	
1,2-Dichloroethene (cis/trans)	330	ug/L	25	
Chloroform	ND	ug/L	25	
1,2-Dichloroethane	ND	ug/L	25	
1,1,1-Trichloroethane	ND	ug/L	25	
Carbon tetrachloride	ND	ug/L	25	
Bromodichloromethane	ND	ug/L	25	
1,2-Dichloropropane	ND	ug/L	25	
trans-1,3-Dichloropropene	ND	ug/L	25	
Trichloroethene	38	ug/L	25	
Dibromochloromethane	ND	ug/L	25	
1,1,2-Trichloroethane	ND	ug/L	25	
Benzene	ND	ug/L	25	
cis-1,3-Dichloropropene	ND	ug/L	25	
2-Chloroethylvinylether	ND	ug/L	50	
Bromoform	ND	ug/L	25	
1,1,2,2-Tetrachloroethane	ND	ug/L	25	
Tetrachloroethene	150	ug/L	25	
Toluene	ND	ug/L	25	
Chlorobenzene	ND	ug/L	25	
Ethylbenzene	ND	ug/L	25	

Surrogate	Recovery	
Toluene-d8	101	%
4-Bromofluorobenzene	98	%
1,2-Dichloroethane-d4	113	%

Note u : All reporting limits raised due to high levels of target analytes.

ND = Not detected
NA = Not applicable

Reported By: Jyoti Kumar Approved By: Khaja Eazazuddin

Ensec
A Corning Co

Volatiles Library Search (10 Compound TID)

Method 624

Client Name: GEO Engineering
Client ID: GEO-3D
Lab ID: 027587-0001-SA
Matrix: AQUEOUS
Authorized: 01 MAR 93

Sampled: 01 MAR 93
Prepared: NA

Received: 01 MAR 93
Analyzed: 05 MAR 93

Parameter	Result	Units	Reporting Limit
TID Compound 1	ND	ug/L	
TID Compound 2	ND	ug/L	
TID Compound 3	ND	ug/L	
TID Compound 4	ND	ug/L	
TID Compound 5	ND	ug/L	
TID Compound 6	ND	ug/L	
TID Compound 7	ND	ug/L	
TID Compound 8	ND	ug/L	
TID Compound 9	ND	ug/L	
TID Compound 10	ND	ug/L	

ND = Not detected
NA = Not applicable

Reported By: Jyoti Kumar

Approved By: Khaja Eazazuddin

Priority Pollutant Volatile Organics

Method 624

Client Name: GEO'Engineering
Client ID: GEO-2D
Lab ID: 027587-0002-SA
Matrix: AQUEOUS Sampled: 01 MAR 93 Received: 01 MAR 93
Authorized: 01 MAR 93 Prepared: NA Analyzed: 05 MAR 93

Parameter	Result	Units	Reporting Limit	
Chloromethane	ND	ug/L	50	u
Bromomethane	ND	ug/L	50	
Vinyl Chloride	ND	ug/L	50	
Chloroethane	ND	ug/L	50	
Methylene chloride	ND	ug/L	25	
1,1-Dichloroethene	ND	ug/L	25	
1,1-Dichloroethane	ND	ug/L	25	
1,2-Dichloroethene (cis/trans)	640	ug/L	25	
Chloroform	ND	ug/L	25	
1,2-Dichloroethane	ND	ug/L	25	
1,1,1-Trichloroethane	ND	ug/L	25	
Carbon tetrachloride	ND	ug/L	25	
Bromodichloromethane	ND	ug/L	25	
1,2-Dichloropropane	ND	ug/L	25	
trans-1,3-Dichloropropene	ND	ug/L	25	
Trichloroethene	160	ug/L	25	
Dibromochloromethane	ND	ug/L	25	
1,1,2-Trichloroethane	ND	ug/L	25	
Benzene	11	ug/L	25	J
cis-1,3-Dichloropropene	ND	ug/L	25	
2-Chloroethylvinylether	ND	ug/L	50	
Bromoform	ND	ug/L	25	
1,1,2,2-Tetrachloroethane	ND	ug/L	25	
Tetrachloroethene	650	ug/L	25	
Toluene	ND	ug/L	25	
Chlorobenzene	ND	ug/L	25	
Ethylbenzene	ND	ug/L	25	

Surrogate	Recovery	
Toluene-d8	98	%
4-Bromofluorobenzene	106	%
1,2-Dichloroethane-d4	108	%

Note u : All reporting limits raised due to high levels of target analytes.

Note J : Result is detected below the reporting limit or is an estimated concentration.

ND = Not detected
NA = Not applicable

Reported By: Jyoti Kumar Approved By: Khaja Eazazuddin

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Volatiles Library Search (10 Compound TID)

Method 624

Client Name: GEO Engineering
Client ID: GEO-2D
Lab ID: 027587-0002-SA
Matrix: AQUEOUS Sampled: 01 MAR 93 Received: 01 MAR 93
Authorized: 01 MAR 93 Prepared: NA Analyzed: 05 MAR 93

Parameter	Result	Units	Reporting Limit
TID Compound 1	ND	ug/L	
TID Compound 2	ND	ug/L	
TID Compound 3	ND	ug/L	
TID Compound 4	ND	ug/L	
TID Compound 5	ND	ug/L	
TID Compound 6	ND	ug/L	
TID Compound 7	ND	ug/L	
TID Compound 8	ND	ug/L	
TID Compound 9	ND	ug/L	
TID Compound 10	ND	ug/L	

ND = Not detected
NA = Not applicable

Reported By: Jyoti Kumar Approved By: Khaja Eazazuddin

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Priority Pollutant Volatile Organics

Method 624

Client Name: GEO Engineering
Client ID: GEO-1D
Lab ID: 027587-0003-SA
Matrix: AQUEOUS
Authorized: 01 MAR 93

Sampled: 01 MAR 93
Prepared: NA

Received: 01 MAR 93
Analyzed: 05 MAR 93

Parameter	Result	Units	Reporting Limit	
Chloromethane	ND	ug/L	100	u
Bromomethane	ND	ug/L	100	
Vinyl Chloride	260	ug/L	100	
Chloroethane	ND	ug/L	100	
Methylene chloride	ND	ug/L	50	
1,1-Dichloroethene	ND	ug/L	50	
1,1-Dichloroethane	ND	ug/L	50	
1,2-Dichloroethene (cis/trans)	850	ug/L	50	
Chloroform	ND	ug/L	50	
1,2-Dichloroethane	ND	ug/L	50	
1,1,1-Trichloroethane	ND	ug/L	50	
Carbon tetrachloride	ND	ug/L	50	
Bromodichloromethane	ND	ug/L	50	
1,2-Dichloropropane	ND	ug/L	50	
trans-1,3-Dichloropropene	ND	ug/L	50	
Trichloroethene	180	ug/L	50	
Dibromochloromethane	ND	ug/L	50	
1,1,2-Trichloroethane	ND	ug/L	50	
Benzene	ND	ug/L	50	
cis-1,3-Dichloropropene	ND	ug/L	50	
2-Chloroethylvinylether	ND	ug/L	100	
Bromoform	ND	ug/L	50	
1,1,2,2-Tetrachloroethane	ND	ug/L	50	
Tetrachloroethene	340	ug/L	50	
Toluene	ND	ug/L	50	
Chlorobenzene	ND	ug/L	50	
Ethylbenzene	ND	ug/L	50	

Surrogate	Recovery	
Toluene-d8	98	%
4-Bromofluorobenzene	103	%
1,2-Dichloroethane-d4	109	%

Note u : All reporting limits raised due to high levels of target analytes.

ND = Not detected
NA = Not applicable

Reported By: Jyoti Kumar

Approved By: Khaja Eazazuddin

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Volatiles Library Search (10 Compound TID)

Method 624

Client Name: GEO Engineering
Client ID: GEO-1D
Lab ID: 027587-0003-SA
Matrix: AQUEOUS Sampled: 01 MAR 93 Received: 01 MAR 93
Authorized: 01 MAR 93 Prepared: NA Analyzed: 05 MAR 93

Parameter	Result	Units	Reporting Limit	
C-3 Benzene	80	ug/L		J
C-4 Benzene	30	ug/L		J
Unknown	30	ug/L		J
TID Compound 4	ND	ug/L		
TID Compound 5	ND	ug/L		
TID Compound 6	ND	ug/L		
TID Compound 7	ND	ug/L		
TID Compound 8	ND	ug/L		
TID Compound 9	ND	ug/L		
TID Compound 10	ND	ug/L		

Note J : Result is detected below the reporting limit or is an estimated concentration.

ND = Not detected
NA = Not applicable

Reported By: Jyoti Kumar Approved By: Khaja Eazazuddin

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Priority Pollutant Base/Neutral Organics

Method 625

Client Name: GEO Engineering
Client ID: GEO-2D
Lab ID: 027587-0002-SA
Matrix: AQUEOUS Sampled: 01 MAR 93 Received: 01 MAR 93
Authorized: 01 MAR 93 Prepared: 03 MAR 93 Analyzed: 08 MAR 93

Parameter	Result	Units	Reporting Limit	
bis(2-Chloroethyl) ether	ND	ug/L	10	
1,3-Dichlorobenzene	ND	ug/L	10	
1,4-Dichlorobenzene	ND	ug/L	10	
1,2-Dichlorobenzene	ND	ug/L	10	
bis(2-Chloroisopropyl) ether	ND	ug/L	10	
N-Nitroso-di-n-propylamine	ND	ug/L	10	
Hexachloroethane	ND	ug/L	10	
Nitrobenzene	ND	ug/L	10	
Isophorone	ND	ug/L	10	
bis(2-Chloroethoxy)-methane	ND	ug/L	10	
1,2,4-Trichlorobenzene	ND	ug/L	10	
Naphthalene	1.2	ug/L	10	J
Hexachlorobutadiene	ND	ug/L	10	
Hexachlorocyclo-pentadiene	ND	ug/L	10	
2-Chloronaphthalene	ND	ug/L	10	
Dimethyl phthalate	ND	ug/L	10	
Acenaphthylene	ND	ug/L	10	
Acenaphthene	ND	ug/L	10	
2,4-Dinitrotoluene	ND	ug/L	10	
2,6-Dinitrotoluene	ND	ug/L	10	
Diethyl phthalate	ND	ug/L	10	
4-Chlorophenyl phenyl ether	ND	ug/L	10	
Fluorene	ND	ug/L	10	
N-Nitrosodiphenylamine	ND	ug/L	10	
4-Bromophenyl phenyl ether	ND	ug/L	10	
Hexachlorobenzene	ND	ug/L	10	
Phenanthrene	5.4	ug/L	10	J
Anthracene	ND	ug/L	10	
Di-n-butyl phthalate	ND	ug/L	10	
Fluoranthene	ND	ug/L	10	
Pyrene	ND	ug/L	10	
Butyl benzyl phthalate	ND	ug/L	10	
3,3'-Dichlorobenzidine	ND	ug/L	20	
Benzo(a)anthracene	ND	ug/L	10	

(continued on following page)

ND = Not detected
NA = Not applicable

Reported By: David Ercoliani Approved By: Lori Ann Quinn

Priority Pollutant Base/Neutral Organics (CONT.)

Method 625

Client Name: GEO, Engineering
Client ID: GEO-2D
Lab ID: 027587-0002-SA
Matrix: AQUEOUS Sampled: 01 MAR 93 Received: 01 MAR 93
Authorized: 01 MAR 93 Prepared: 03 MAR 93 Analyzed: 08 MAR 93

Parameter	Result	Units	Reporting Limit
bis(2-Ethylhexyl) phthalate	ND	ug/L	10
Chrysene	ND	ug/L	10
Di-n-octyl phthalate	ND	ug/L	10
Benzo(b)fluoranthene	ND	ug/L	10
Benzo(k)fluoranthene	ND	ug/L	10
Benzo(a)pyrene	ND	ug/L	10
Indeno(1,2,3-cd)pyrene	ND	ug/L	10
Dibenz(a,h)anthracene	ND	ug/L	10
Benzo(g,h,i)perylene	ND	ug/L	10

Surrogate	Recovery	
Nitrobenzene-d5	44	%
2-Fluorobiphenyl	49	%
Terphenyl-d14	44	%

Note J : Result is detected below the reporting limit or is an estimated concentration.

ND = Not detected
NA = Not applicable

Reported By: David Ercoliani Approved By: Lori Ann Quinn

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Semivolatiles Library Search (15 Compound ID)

Method 625

Client Name: GEO Engineering
Client ID: GEO-2D
Lab ID: 027587-0002-SA
Matrix: AQUEOUS Sampled: 01 MAR 93 Received: 01 MAR 93
Authorized: 01 MAR 93 Prepared: NA Analyzed: 08 MAR 93

Parameter	Result	Units	Reporting Limit
TID Compound 1	ND	ug/L	
TID Compound 2	ND	ug/L	
TID Compound 3	ND	ug/L	
TID Compound 4	ND	ug/L	
TID Compound 5	ND	ug/L	
TID Compound 6	ND	ug/L	
TID Compound 7	ND	ug/L	
TID Compound 8	ND	ug/L	
TID Compound 9	ND	ug/L	
TID Compound 10	ND	ug/L	
TID Compound 11	ND	ug/L	
TID Compound 12	ND	ug/L	
TID Compound 13	ND	ug/L	
TID Compound 14	ND	ug/L	
TID Compound 15	ND	ug/L	

ND = Not detected
NA = Not applicable

Reported By: David Ercoliani Approved By: Lori Ann Quinn

Priority Pollutant Base/Neutral Organics

Method 625

Client Name: GEO Engineering
Client ID: GEO-2D
Lab ID: 027587-0002-RE
Matrix: AQUEOUS Sampled: 01 MAR 93 Received: 01 MAR 93
Authorized: 01 MAR 93 Prepared: 10 MAR 93 Analyzed: 12 MAR 93

Parameter	Result	Units	Reporting Limit	
bis(2-Chloroethyl) ether	ND	ug/L	10	
1,3-Dichlorobenzene	ND	ug/L	10	
1,4-Dichlorobenzene	ND	ug/L	10	
1,2-Dichlorobenzene	ND	ug/L	10	
bis(2-Chloroisopropyl) ether	ND	ug/L	10	
N-Nitroso-di-n-propylamine	ND	ug/L	10	
Hexachloroethane	ND	ug/L	10	
Nitrobenzene	ND	ug/L	10	
Isophorone	ND	ug/L	10	
bis(2-Chloroethoxy)-methane	ND	ug/L	10	
1,2,4-Trichlorobenzene	ND	ug/L	10	
Naphthalene	ND	ug/L	10	
Hexachlorobutadiene	ND	ug/L	10	
Hexachlorocyclo-pentadiene	ND	ug/L	10	
2-Chloronaphthalene	ND	ug/L	10	
Dimethyl phthalate	ND	ug/L	10	
Acenaphthylene	ND	ug/L	10	
Acenaphthene	ND	ug/L	10	
2,4-Dinitrotoluene	ND	ug/L	10	
2,6-Dinitrotoluene	ND	ug/L	10	
Diethyl phthalate	ND	ug/L	10	
4-Chlorophenyl phenyl ether	ND	ug/L	10	
Fluorene	ND	ug/L	10	
N-Nitrosodiphenylamine	ND	ug/L	10	
4-Bromophenyl phenyl ether	ND	ug/L	10	
Hexachlorobenzene	ND	ug/L	10	
Phenanthrene	4.5	ug/L	10	J
Anthracene	ND	ug/L	10	
Di-n-butyl phthalate	ND	ug/L	10	
Fluoranthene	ND	ug/L	10	
Pyrene	ND	ug/L	10	
Butyl benzyl phthalate	ND	ug/L	10	
3,3'-Dichlorobenzidine	ND	ug/L	20	
Benzo(a)anthracene	ND	ug/L	10	

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ND = Not detected
NA = Not applicable

Reported By: Stacey Miller Approved By: Lori Ann Quinn

Priority Pollutant Base/Neutral Organics (CONT.)

Method 625

Client Name: GEO Engineering
Client ID: GEO-2D
Lab ID: 027587-0002-RE
Matrix: AQUEOUS Sampled: 01 MAR 93 Received: 01 MAR 93
Authorized: 01 MAR 93 Prepared: 10 MAR 93 Analyzed: 12 MAR 93

Parameter	Result	Units	Reporting Limit
bis(2-Ethylhexyl) phthalate	ND	ug/L	10
Chrysene	ND	ug/L	10
Di-n-octyl phthalate	ND	ug/L	10
Benzo(b)fluoranthene	ND	ug/L	10
Benzo(k)fluoranthene	ND	ug/L	10
Benzo(a)pyrene	ND	ug/L	10
Indeno(1,2,3-cd)pyrene	ND	ug/L	10
Dibenz(a,h)anthracene	ND	ug/L	10
Benzo(g,h,i)perylene	ND	ug/L	10

Surrogate	Recovery	
Nitrobenzene-d5	43	%
2-Fluorobiphenyl	50	%
Terphenyl-d14	50	%

Note J : Result is detected below the reporting limit or is an estimated concentration.

ND = Not detected
NA = Not applicable

Reported By: Stacey Miller Approved By: Lori Ann Quinn

Base/Neutrals Library Search (15 Compound TID)

Method 625

Client Name: GEO Engineering
Client ID: GEO-2D
Lab ID: 027587-0002-RE
Matrix: AQUEOUS Sampled: 01 MAR 93 Received: 01 MAR 93
Authorized: 01 MAR 93 Prepared: NA Analyzed: 12 MAR 93

Parameter	Result	Units	Reporting Limit	
Tetrachloroethene	36	ug/L		J
Unknown	5.0	ug/L		J
Unknown Amide	4.0	ug/L		J
TID Compound 4	ND	ug/L		
TID Compound 5	ND	ug/L		
TID Compound 6	ND	ug/L		
TID Compound 7	ND	ug/L		
TID Compound 8	ND	ug/L		
TID Compound 9	ND	ug/L		
TID Compound 10	ND	ug/L		
TID Compound 11	ND	ug/L		
TID Compound 12	ND	ug/L		
TID Compound 13	ND	ug/L		
TID Compound 14	ND	ug/L		
TID Compound 15	ND	ug/L		

Note J : Result is detected below the reporting limit or is an estimated concentration.

ND = Not detected
NA = Not applicable

Reported By: Stacey Miller Approved By: Lori Ann Quinn

SAMPLE DESCRIPTION INFORMATION
for
GEO Engineering

Lab ID	Client ID	Matrix	Sampled Date	Sampled Time	Received Date
027612-0001-SA	TP-1C	SOIL	03 MAR 93	09:20	04 MAR 93
027612-0002-SA	TP-2B	SOIL	03 MAR 93	11:00	04 MAR 93
027612-0003-SA	TP-2C	SOIL	03 MAR 93	11:15	04 MAR 93
027612-0004-FB	FIELD BLANK	AQUEOUS	03 MAR 93		04 MAR 93

Priority Pollutant Volatile Organics

Method 8240

Client Name: GEO Engineering
Client ID: TP-1C
Lab ID: 027612-0001-SA
Matrix: SOIL — Sampled: 03 MAR 93 — Received: 04 MAR 93
Authorized: 04 MAR 93 — Prepared: 05 MAR 93 — Analyzed: 05 MAR 93

Parameter	Result	Dry Weight Units	Reporting Limit	
Chloromethane	ND	ug/kg	1200	u
Bromomethane	ND	ug/kg	1200	
Vinyl Chloride	ND	ug/kg	1200	
Chloroethane	ND	ug/kg	1200	
Methylene chloride	ND	ug/kg	580	
1,1-Dichloroethene	ND	ug/kg	580	
1,1-Dichloroethane	ND	ug/kg	580	
1,2-Dichloroethene (cis/trans)	200	ug/kg	580	J
Chloroform	ND	ug/kg	580	
1,2-Dichloroethane	ND	ug/kg	580	
1,1,1-Trichloroethane	ND	ug/kg	580	
Carbon tetrachloride	ND	ug/kg	580	
Bromodichloromethane	ND	ug/kg	580	
1,2-Dichloropropane	ND	ug/kg	580	
trans-1,3-Dichloropropene	ND	ug/kg	580	
Trichloroethene	580	ug/kg	580	
Dibromochloromethane	ND	ug/kg	580	
1,1,2-Trichloroethane	ND	ug/kg	580	
Benzene	ND	ug/kg	580	
cis-1,3-Dichloropropene	ND	ug/kg	580	
2-Chloroethylvinylether	ND	ug/kg	1200	
Bromoform	ND	ug/kg	580	
1,1,2,2-Tetrachloroethane	ND	ug/kg	580	
Tetrachloroethene	16000	ug/kg	580	B
Toluene	ND	ug/kg	580	
Chlorobenzene	ND	ug/kg	580	
Ethylbenzene	ND	ug/kg	580	

Surrogate	Recovery	
Toluene-d8	113	%
4-Bromofluorobenzene	112	%
1,2-Dichloroethane-d4	109	%

(continued on following page)

ND = Not detected
NA = Not applicable

Reported By: Joe Dininno — Approved By: Shu-Wen Kao

Volatiles Library Search (10 Compound TID)

Method 8240

Client Name: GEO Engineering
Client ID: TP-1C
Lab ID: 027612-0001-SA
Matrix: SOIL Sampled: 03 MAR 93 Received: 04 MAR 93
Authorized: 04 MAR 93 Prepared: NA Analyzed: 05 MAR 93

Parameter	Result	Dry Weight Units	Reporting Limit	
Unknown	1700	ug/kg		J
TID Compound 2	ND	ug/kg		
TID Compound 3	ND	ug/kg		
TID Compound 4	ND	ug/kg		
TID Compound 5	ND	ug/kg		
TID Compound 6	ND	ug/kg		
TID Compound 7	ND	ug/kg		
TID Compound 8	ND	ug/kg		
TID Compound 9	ND	ug/kg		
TID Compound 10	ND	ug/kg		

Note J : Result is detected below the reporting limit or is an estimated concentration.

Percent Moisture is 14%. All results and limits are reported on a dry weight basis.

ND = Not detected
NA = Not applicable

Reported By: Joe Dininno Approved By: Shu-Wen Kao

Priority Pollutant Volatile Organics

Method 8240

Client Name: GEO Engineering
Client ID: TP-2B
Lab ID: 027612-0002-SA
Matrix: SOIL Sampled: 03 MAR 93 Received: 04 MAR 93
Authorized: 04 MAR 93 Prepared: 05 MAR 93 Analyzed: 05 MAR 93

Parameter	Result	Dry Weight Units	Reporting Limit	
Chloromethane	ND	ug/kg	1100	u
Bromomethane	ND	ug/kg	1100	
Vinyl Chloride	ND	ug/kg	1100	
Chloroethane	ND	ug/kg	1100	
Methylene chloride	ND	ug/kg	540	
1,1-Dichloroethene	ND	ug/kg	540	
1,1-Dichloroethane	ND	ug/kg	540	
1,2-Dichloroethene (cis/trans)	ND	ug/kg	540	
Chloroform	ND	ug/kg	540	
1,2-Dichloroethane	ND	ug/kg	540	
1,1,1-Trichloroethane	ND	ug/kg	540	
Carbon tetrachloride	ND	ug/kg	540	
Bromodichloromethane	ND	ug/kg	540	
1,2-Dichloropropane	ND	ug/kg	540	
trans-1,3-Dichloropropene	ND	ug/kg	540	
Trichloroethene	ND	ug/kg	540	
Dibromochloromethane	ND	ug/kg	540	
1,1,2-Trichloroethane	ND	ug/kg	540	
Benzene	ND	ug/kg	540	
cis-1,3-Dichloropropene	ND	ug/kg	540	
2-Chloroethylvinylether	ND	ug/kg	1100	
Bromoform	ND	ug/kg	540	
1,1,2,2-Tetrachloroethane	ND	ug/kg	540	
Tetrachloroethene	3000	ug/kg	540	B
Toluene	ND	ug/kg	540	
Chlorobenzene	ND	ug/kg	540	
Ethylbenzene	ND	ug/kg	540	

Surrogate	Recovery	
Toluene-d8	113	%
4-Bromofluorobenzene	112	%
1,2-Dichloroethane-d4	109	%

Note u : All reporting limits raised due to high levels of target analytes.

Percent Moisture is 7.9%. All results and limits are reported on a dry weight basis.

Note B : Compound is also detected in the blank.

ND = Not detected
NA = Not applicable

Reported By: Joe Dininno Approved By: Shu-Wen Kao

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Volatiles Library Search (10 Compound TID)

Method 8240

Client Name: GEO Engineering
Client ID: TP-2B
Lab ID: 027612-0002-SA
Matrix: SOIL Sampled: 03 MAR 93 Received: 04 MAR 93
Authorized: 04 MAR 93 Prepared: NA Analyzed: 05 MAR 93

Parameter	Result	Dry Weight Units	Reporting Limit	
Unknown	1400	ug/kg		J
1,2-Dichlorobenzene	130	ug/kg		J
TID Compound 3	ND	ug/kg		
TID Compound 4	ND	ug/kg		
TID Compound 5	ND	ug/kg		
TID Compound 6	ND	ug/kg		
TID Compound 7	ND	ug/kg		
TID Compound 8	ND	ug/kg		
TID Compound 9	ND	ug/kg		
TID Compound 10	ND	ug/kg		

Note J : Result is detected below the reporting limit or is an estimated concentration.

Percent Moisture is 7.9%. All results and limits are reported on a dry weight basis.

ND = Not detected
NA = Not applicable

Reported By: Joe Dininno Approved By: Shu-Wen Kao

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Priority Pollutant Volatile Organics

Method 8240

Client Name: GEO Engineering
Client ID: TP-2C
Lab ID: 027612-0003-SA
Matrix: SOIL
Authorized: 04 MAR 93

Sampled: 03 MAR 93
Prepared: 05 MAR 93

Received: 04 MAR 93
Analyzed: 05 MAR 93

Parameter	Result	Dry Weight Units	Reporting Limit	
Chloromethane	ND	ug/kg	1200	u
Bromomethane	ND	ug/kg	1200	
Vinyl Chloride	ND	ug/kg	1200	
Chloroethane	ND	ug/kg	1200	
Methylene chloride	ND	ug/kg	580	
1,1-Dichloroethene	ND	ug/kg	580	
1,1-Dichloroethane	ND	ug/kg	580	
1,2-Dichloroethene (cis/trans)	ND	ug/kg	580	
Chloroform	ND	ug/kg	580	
1,2-Dichloroethane	ND	ug/kg	580	
1,1,1-Trichloroethane	ND	ug/kg	580	
Carbon tetrachloride	ND	ug/kg	580	
Bromodichloromethane	ND	ug/kg	580	
1,2-Dichloropropane	ND	ug/kg	580	
trans-1,3-Dichloropropene	ND	ug/kg	580	
Trichloroethene	220	ug/kg	580	J
Dibromochloromethane	ND	ug/kg	580	
1,1,2-Trichloroethane	ND	ug/kg	580	
Benzene	ND	ug/kg	580	
cis-1,3-Dichloropropene	ND	ug/kg	580	
2-Chloroethylvinylether	ND	ug/kg	1200	
Bromoform	ND	ug/kg	580	
1,1,2,2-Tetrachloroethane	ND	ug/kg	580	
Tetrachloroethene	13000	ug/kg	580	B
Toluene	ND	ug/kg	580	
Chlorobenzene	150	ug/kg	580	J
Ethylbenzene	ND	ug/kg	580	

Surrogate	Recovery	
Toluene-d8	113	%
4-Bromofluorobenzene	118	%
1,2-Dichloroethane-d4	109	%

(continued on following page)

ND = Not detected
NA = Not applicable

Reported By: Joe Dininno

Approved By: Shu-Wen Kao

Priority Pollutant Volatile Organics (CONT.)

Method 8240

Client Name: GEO Engineering
Client ID: TP-2C
Lab ID: 027612-0003-SA
Matrix: SOIL Sampled: 03 MAR 93 Received: 04 MAR 93
Authorized: 04 MAR 93 Prepared: 05 MAR 93 Analyzed: 05 MAR 93

Note u : All reporting limits raised due to high levels of target analytes.

Percent Moisture is 14%. All results and limits are reported on a dry weight basis.

Note J : Result is detected below the reporting limit or is an estimated concentration.

Note B : Compound is also detected in the blank.

ND = Not detected
NA = Not applicable

Reported By: Joe Dininno Approved By: Shu-Wen Kao

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Volatiles Library Search (10 Compound TID)

Method 8240

Client Name: GEO Engineering
Client ID: TP-2C
Lab ID: 027612-0003-SA
Matrix: SOIL
Authorized: 04 MAR 93

Sampled: 03 MAR 93
Prepared: NA

Received: 04 MAR 93
Analyzed: 05 MAR 93

Parameter	Result	Dry Weight Units	Reporting Limit	
Unknown	1300	ug/kg		J
1,2-Dichlorobenzene	610	ug/kg		J
TID Compound 3	ND	ug/kg		
TID Compound 4	ND	ug/kg		
TID Compound 5	ND	ug/kg		
TID Compound 6	ND	ug/kg		
TID Compound 7	ND	ug/kg		
TID Compound 8	ND	ug/kg		
TID Compound 9	ND	ug/kg		
TID Compound 10	ND	ug/kg		

Note J : Result is detected below the reporting limit or is an estimated concentration.

Percent Moisture is 14%. All results and limits are reported on a dry weight basis.

ND = Not detected
NA = Not applicable

Reported By: Joe Dininno

Approved By: Shu-Wen Kao

Priority Pollutant Volatile Organics

Method 8240

Client Name: GEO Engineering
Client ID: FIELD BLANK
Lab ID: 027612-0004-FB
Matrix: AQUEOUS
Authorized: 04 MAR 93

Sampled: 03 MAR 93
Prepared: NA

Received: 04 MAR 93
Analyzed: 08 MAR 93

Parameter	Result	Units	Reporting Limit	
Chloromethane	ND	ug/L	10	
Bromomethane	ND	ug/L	10	
Vinyl Chloride	ND	ug/L	10	
Chloroethane	ND	ug/L	10	
Methylene chloride	1.1	ug/L	5.0	J
1,1-Dichloroethene	ND	ug/L	5.0	
1,1-Dichloroethane	ND	ug/L	5.0	
1,2-Dichloroethene (cis/trans)	ND	ug/L	5.0	
Chloroform	ND	ug/L	5.0	
1,2-Dichloroethane	ND	ug/L	5.0	
1,1,1-Trichloroethane	ND	ug/L	5.0	
Carbon tetrachloride	ND	ug/L	5.0	
Bromodichloromethane	ND	ug/L	5.0	
1,2-Dichloropropane	ND	ug/L	5.0	
trans-1,3-Dichloropropene	ND	ug/L	5.0	
Trichloroethene	ND	ug/L	5.0	
Dibromochloromethane	ND	ug/L	5.0	
1,1,2-Trichloroethane	ND	ug/L	5.0	
Benzene	ND	ug/L	5.0	
cis-1,3-Dichloropropene	ND	ug/L	5.0	
2-Chloroethylvinylether	ND	ug/L	10	
Bromoform	ND	ug/L	5.0	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	
Tetrachloroethene	ND	ug/L	5.0	
Toluene	ND	ug/L	5.0	
Chlorobenzene	ND	ug/L	5.0	
Ethylbenzene	ND	ug/L	5.0	

Surrogate	Recovery	
Toluene-d8	104	%
4-Bromofluorobenzene	96	%
1,2-Dichloroethane-d4	98	%

Note J : Result is detected below the reporting limit or is an estimated concentration.

ND = Not detected
NA = Not applicable

Reported By: Joe Dininno

Approved By: Shu-Wen Kao

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A Comung

Volatiles Library Search (10 Compound TID)

Method 8240

Client Name: GEO Engineering
Client ID: FIELD BLANK
Lab ID: 027612-0004-FB
Matrix: AQUEOUS
Authorized: 04 MAR 93

Sampled: 03 MAR 93
Prepared: NA

Received: 04 MAR 93
Analyzed: 08 MAR 93

Parameter	Result	Units	Reporting Limit	
Unknown	7.0	ug/L		J
Acetone	6.5	ug/L		J
2-Hexanone	1.9	ug/L		J
4-Methyl-2-Pentanone	1.1	ug/L		J
TID Compound 5	ND	ug/L		
TID Compound 6	ND	ug/L		
TID Compound 7	ND	ug/L		
TID Compound 8	ND	ug/L		
TID Compound 9	ND	ug/L		
TID Compound 10	ND	ug/L		

Note J : Result is detected below the reporting limit or is an estimated concentration.

ND - Not detected
NA - Not applicable

Reported By: Joe Dininno

Approved By: Shu-Wen Kao

062.A

New Jersey Department of Environmental Protection and Energy

Check here if Revised Billing

ENFORCEMENT INVOICE

Document # HWSF-2965
Date Rec'd 6-21-93
Amount 2274.24

07-22-23

SION DRPSR - M.F.O.
OGRAM Discharge Response

TYPE: ☐ Fine/Penalty ☐ Cost Recovery

RECEIVED
JUL 1993

FACILITY ID NO. _____
PROGRAM ID NO. _____

e/Company Name Biddleman Incorporated
Address 200 Mount Pleasant Avenue, Bl
West Orange, NJ 07052
ATTN: Mr. Murray Biddleman

Please identify appropriate category:

☐ County ☐ Local ☐ Private
Authority: ☐ Regional ☐ Local
☐ Industrial ☐ Commercial ☐ Other - _____ Specify

DATE ASSESSED	DESCRIPTION	AMOUNT
2 1993	Administrative oversight costs associated with a discharge 900829SP01 Period between 8/29/90 and ~~1/8/93~~ 12/31/92 N.J.S.A. 58:10-23.11 et seq.	2712.56
DATE DUE:	30 days from receipt of invoice	AMOUNT DUE: ~~2712.56~~ 2274.24

Make check payable to: **Treasurer, State of New Jersey** Mail to: **NJDEPE, Bureau of Revenue CN 417, Trenton, N.J. 08625-0417**

COPY DISTRIBUTION: White - Remittance Copy Yellow - Company Pink - Bureau of Revenue Goldenrod - Division

3989

55-2/212
280

MURRAY J. BIDDELMAN
200 MOUNT PLEASANT AVENUE, # 1B
WEST ORANGE, NJ 07052-4032

JUNE 15 19 93

PAY TO THE ORDER OF TREASURER, STATE OF N.J. $ 2712.56/100

TWENTY SEVEN HUNDRED TWELVE and 56/100 DOLLARS

FIRST FIDELITY

First Fidelity Bank, N.A. New Jersey
Orange Valley Office
394 Scotland Road
Orange, N.J. 07050

280

Murray J Biddleman

FOR _____

DEP-062A
10/91

New Jersey Department of Environmental Protection and Energy

☐ Check here if Revised Billing

ENFORCEMENT INVOICE

07-22-23

RECEIVED JUN 2 1993

Document #
Date Rec'd
Amount

DIVISION [illegible]
PROGRAM Discharge Response

TYPE: ☐ Fine/Penalty ☒ Cost Recovery

FACILITY ID NO.
PROGRAM ID NO.

Case/Company Name [illegible]
Address [illegible]

Please identify appropriate category:

☐ County ☐ Local ☐ Private
Authority: ☐ Regional ☐ Local
☐ Industrial ☐ Commercial ☐ Other - _____ *Specify*

DATE ASSESSED	DESCRIPTION	AMOUNT
MAY 5 1993	For natural resource costs associated with a discharge [illegible]	
DATE DUE:	30 days from receipt of invoice	**AMOUNT DUE:**

Make check payable to: **Treasurer, State of New Jersey**

Mail to: **NJDEPE, Bureau of Revenue**
CN 417, Trenton, N.J. 08625-0417

COPY DISTRIBUTION: White - Remittance Copy Yellow - Company Pink - Bureau of Revenue Goldenrod - Division